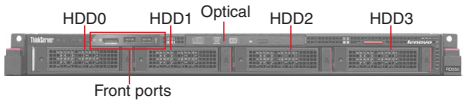
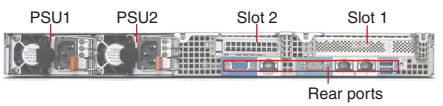
ThinkServer RD350 with 3.5" Disk Drive Bay Platform Specifications

Components	Specification
Form factor	1U rack
Processor	Up to two **105W Intel Xeon E5-2600 v3** family processors with 12 cores up to 1.8 GHz, 10 cores up to 2.6 GHz, 8 cores up to 2.6 GHz, 6 cores up to 2.4 GHz, 4 cores up to 3 GHz. Two QPI link up to 9.6 GT/s. Up to 2133MHz memory speed. Up to 30MB cache
Memory DIMMs	16 DIMM sockets. 4 channels per processor, 2 DIMMs per channel. **RDIMM** or **LRDIMM** (cannot be intermixed), DDR4, 2133MHz
Memory capacity	256GB (RDIMM, 16GB x 16)/512GB (LRDIMM, 32GB x 16), 2nd CPU is needed
Memory protection	ECC, memory mirroring, lockstep, and memory sparing
RAID support	**RAID 0**, **1**, **10** with embedded **RAID 110i**, 6Gb/s SATA, optional key for RAID5. **RAID 0**, **1**, **10** with **RAID 500**, PCIe adapter, 6Gb/s SAS/SATA, optional key for RAID5. **RAID 0**, **1**, **10**, **5**, **6** with **RAID 710**, PCIe adapter, 6Gb/s SAS/SATA, 1GB memory, optional CacheVault flash cache with super capacitor, CacheCade Pro, or FastPath upgrade key
Disk drive bays	Up to 4 x 3.5" disk drive bays
SD module	Optional SD module, supports up to 2 optional SDHC flash cards
Internal storage	3.5" SATA (7.2K 6Gbs HDD) 1TB/2TB/3TB/4TB/ 3.5" SAS (7.2K 6Gbs HDD) 1TB/2TB/3TB/4TB/ 2.5" SAS SSD (12Gbs) 200GB/400GB/800GB 2.5" SATA SSD (6Gbs) 120GB/240GB/300GB/480GB/600GB/800GB SDHC flash card 8GB/32GB *Note: 1. SAS drive needs SAS adapter. 2. SDHC flash card needs SDHC flash memory module. 3. On 3.5" models, 2.5" drive comes with a 3.5" carrier.*
Optical drive	Optional one UltraSlim optical drive bay, supports DVD-ROM or DVD±RW
Tape drive bays	No internal tape bay
Network interfaces	One dedicated management port, two Gigabit Ethernet ports (RJ-45). Supports optional discrete network adapters via PCIe slots
Security features	Power-on and administrator password. Optional Trusted Platform Module (TCG 1.2-compliant). Optional chassis intrusion switch
Systems management	Supports ThinkServer System Manager (TSM), optional TSM Premium. UEFI. Onboard Aspeed AST2400 graphics/management processor, IPMI 2.0-compliant baseboard management controller (BMC). Control Panel LEDs shows the status of power, ID, network, system. Supports ThinkServer management software: Diagnostics, Deployment Manager, Energy Manager, System Manager, Partner Pack for VMware vCenter and Microsoft System Center Operations Manager, Power Planner
Power supply	Up to two redundant hot-swap 450 W ac or 550 W ac or 750 W ac power supplies. 550 W is 80 PLUS Platinum qualified, 750 W is 80 PLUS Platinum or Titanium qualified, 450 W is 80 PLUS Gold qualified. 750 W Titanium is 200V - 240V, others are 110V - 240V
Operating systems supported	Microsoft Windows Server 2012 R2/2012/2008 R2. Windows Small Business Server 2011. Red Hat Enterprise Linux 6.5/6.6/7. SUSE Linux Enterprise Server 11. VMware vSphere (ESXi) 5.1 P5/5.5 U2/6.0
Rack kit	Optional slide or static rack kit on selected model
Base warranty	1 or 3-year limited onsite service with 9x5/NBD. Some parts are Customer Replaceable Units

Components	Specification
Graphics	Onboard Aspeed AST2400 with 16MB memory, one DisplayPort on front, one VGA on rear. Maximum resolution: 1920x1200@60Hz
Front ports	Two USB 2.0, one DisplayPort
Rear ports	One VGA, two USB 3.0, one RJ-45 (dedicated mgmt), two ethernet, one serial (9-pin)
Cooling	6 (5+1, dual processors) or 4 (3+1, single processor) fans, non-hot swap
Hot-swap parts	Disk drives, power supplies
Noise emissions	Operating: < 6.5 Bels, Idle: < 5.4 Bels (Maximum configuration)
Environmental specification	Temperature - operating: 50 °F to 95 °F (10 °C to 35 °C) Temperature - non operating (no package): -10 °C to 60 °C Temperature - non operating (with package): -40 °C to 70 °C Altitude - operating: (Unpressurized): 0-10000ft (0-3048m) Humidity - operating: 8%~90%, non-condensing Humidity - storage (with package): 8%~90%, non-condensing
Weight	Minimum configuration: 13 kg (28.66 lb), maximum: 19.1 kg (42.11 lb)
Dimensions	Height: 43 mm (1.7 in), width: 482 mm (19 in), depth: 781.5 mm (30.77 in)





Expansion slots

Up to 2 PCIe 3.0 slots via two optional riser cards.
Slot 1 (riser card 1): PCIe 3.0 x16, half length, full height, CPU1
Slot 2 (riser card 2): PCIe 3.0 x16, low-profile, half length, CPU2, requires 2nd riser card and 2nd CPU

Core options for ThinkServer RD350 (partial)

4X70F28590 16GB 2R x4 PC4-17000R RDIMM DDR4-2133 4Gbit
4X70F28591 32GB 4R x4 PC4-17000LR LRDIMM DDR4-2133 4Gbit
4XF0G45865 SDHC Flash Memory Module
4X70F28593 32GB SDHC Flash Memory card
4XB0F28690 Lenovo ThinkServer RAID110i Raid 5 Upgrade
4XB0G45759 ThinkServer RAID 500 Upgrade Key for Advanced RAID
4XF0G45867 ThinkServer System Manager Premium
4X20F28576 750W Titanium Hot Swap Power Supply
4X90F92980 DisplayPort to VGA Dongle

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ThinkServer RD350 with 2.5" Disk Drive Bay Platform Specifications

Components	Specification
Form factor	1U rack
Processor	Up to two **105W Intel Xeon E5-2600 v3** family processors with 12 cores up to 1.8 GHz, 10 cores up to 2.6 GHz, 8 cores up to 2.6 GHz, 6 cores up to 2.4 GHz, 4 cores up to 3 GHz. Two QPI link up to 9.6 GT/s. Up to 2133MHz memory speed. Up to 30MB cache
Memory DIMMs	16 DIMM sockets. 4 channels per processor, 2 DIMMs per channel. **RDIMM** or **LRDIMM** (cannot be intermixed), DDR4, 2133MHz
Memory capacity	256GB (RDIMM, 16GB x 16)/512GB (LRDIMM, 32GB x 16), 2nd CPU is needed
Memory protection	ECC, memory mirroring, lockstep, and memory sparing
RAID support	**RAID 0**, **1**, **10** with embedded **RAID 110i**, 6Gb/s SATA, optional key for RAID5. **RAID 0**, **1**, **10** with **RAID 500**, PCIe adapter, 6Gb/s SAS/SATA, optional key for RAID5/50. **RAID 0**, **1**, **10**, **5**, **50**, **6**, **60** with **RAID 710**, PCIe adapter, 6Gb/s SAS/SATA, 1GB memory, optional CacheVault flash cache with super capacitor, CacheCade Pro, or FastPath upgrade key
Disk drive bays	Up to 8 x 2.5" disk drive bays
SD module	Optional SD module, supports up to 2 optional SDHC flash cards
Internal storage	2.5" SATA (7.2K 6Gbs HDD) 500GB/1TB 2.5" SAS (10K 6Gbs HDD) 300GB/600GB/900GB/1.2TB 2.5" SAS (15K 6Gbs HDD) 146GB/300GB/450GB/600GB 2.5" SAS SSD (12Gbs) 200GB/400GB/800GB 2.5" SATA SSD (6Gbs) 120GB/240GB/300GB/480GB/600GB/800GB SDHC flash card 8GB/32GB *Note: 1. SAS drive needs SAS adapter. 2. SDHC flash card needs SDHC flash memory module.*
Optical drive	Optional one UltraSlim optical drive bay, supports DVD-ROM or DVD±RW
Tape drive bays	No internal tape bay
Network interfaces	One dedicated management port, two Gigabit Ethernet ports (RJ-45). Supports optional discrete network adapters via PCIe slots
Security features	Power-on and administrator password. Optional Trusted Platform Module (TCG 1.2-compliant). Optional chassis intrusion switch
Systems management	Supports ThinkServer System Manager (TSM), optional TSM Premium. UEFI. Onboard Aspeed AST2400 graphics/management processor, IPMI 2.0-compliant baseboard management controller (BMC). Control Panel LEDs shows the status of power, ID, network, system. Supports ThinkServer management software: Diagnostics, Deployment Manager, Energy Manager, System Manager, Partner Pack for VMware vCenter and Microsoft System Center Operations Manager, Power Planner
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Cooling	6 (5+1, dual processors) or 4 (3+1, single processor) fans, non-hot swap
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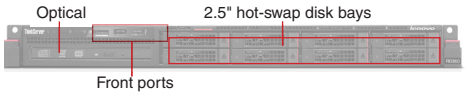

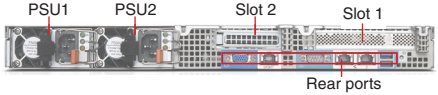

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4XB0F28690 Lenovo ThinkServer RAID110i Raid 5 Upgrade
4XB0G45759 ThinkServer RAID 500 Upgrade Key for Advanced RAID
4XF0G45867 ThinkServer System Manager Premium
4X20F28576 750W Titanium Hot Swap Power Supply
4X90F92980 DisplayPort to VGA Dongle

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